SOLID HIGH POLYMER ELECTROLYTIC FILM AND ITS PRODUCTION

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Abstract of **JP2001236973**

PROBLEM TO BE SOLVED: To provide a solid high polymer electrolytic film with good proton conductivity in a high-temperature and low-humidity condition. SOLUTION: The film having proton conductivity, formed of a main acidic polymer for forming the electrolytic film is dried with a hot air (S12) and immerged in a basic polymer solution for impregnating the film with the basic polymer (S14) to form the solid high polymer electrolytic film. The most basic polymer is introduced into a portion of the main polymer, functioning as a proton conductive path, for carrying the conduction of proton. The solid high polymer electrolytic film which contains the basic polymer for carrying the conduction of the proton has more proton conductivity even at a high temperature over a water boiling point in a low-humidity condition than in the case of the conduction of the proton as hydrate.